

AMENDMENT TO THE CLAIMS

Please amend the claims 19-27 such that the status of the claims is as follows:

1-18. Cancelled.

19. (Currently Amended) Method for reception of radio data transmitted between at least two emitters and one receiver wherein the method comprises:

a first step of receiving data transmitted by ~~at least one~~ a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a sequence in time of symbols comprising firstly information data elements, and secondly reference elements called pilots, distributed within the information data elements according to a predetermined pattern, and for which the value during emission is known to the receiver, at least two of the emitters using distinct pilot patterns such that at any given moment and at any given frequency, the receiver can only receive one pilot from the emitters;

a second step of identifying the emitter, which emitted the data, using a control information transmission signal, which allows notably the receiver, upon data reception, to identify the emitter that emitted them; and

a third step of determining the pilot pattern used by the identified emitter.

20. (Previously Presented) Method for reception of data according to claim 19, wherein, when the pilot pattern was generated using a generation function for which one parameter is an identifier of the associated emitter, the step of determining implements the generation function as a function of the identified emitter.

21. (Previously Presented) Method for reception of data according to claim 19 and further

comprising a step for extracting the pilots from the multicarrier data transmission signal, and a step for estimating the transfer function of a transmission channel associated with the multicarrier data transmission signal.

22. (Currently Amended) Method for reception of data according to claim 19, wherein the multicarrier data transmission signal is of the OFDM type.

23. (Previously Presented) Method for reception of data according to claim 19, wherein each of the emitters uses a specific pilot pattern.

24. (Previously Presented) Method for reception of data according to claim 19, wherein said method is implemented in a cellular radio communication network, the emitters are base stations of the network, and the receiver is a mobile terminal.

25. (Currently Amended) Cellular radio communication system comprising:

at least two emitters and one receiver, implementing ~~at least one~~ a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots distributed within the information data elements according to a predetermined pattern, and for which the value on emission is known to the receiver;

wherein at least two of the emitters use distinct pilot patterns, such that only one pilot can be received by the receiver from the emitters, at a given time and at a given frequency; and

wherein said receiver comprises:

first means of receiving data transmitted by the multicarrier data transmission signal;

second means of identifying the emitter that emitted the data, using a

control information transmission signal, which allows notably the receiver to identify the emitter that emitted the data when it receives them; and

third means of determining the pilot pattern used by the identified emitter.

26. (Currently Amended) Mobile in a cellular radio communication system, comprising:

means of receiving radio data transmitted by at least two emitters, in the form of ~~at least one~~ a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots distributed within the information data elements according to a predetermined pattern, and for which the value on emission is known to the mobile, at least two of the emitters using distinct pilot patterns, such that only one pilot can be received by the receiver from the emitters, at a given time and at a given frequency;

means of receiving data transmitted by the multicarrier data transmission signal;

means of identifying the emitter that emitted the data, using a control information transmission signal, which allows notably the receiver to identify the emitter that emitted the data when it receives them; and

means of determining the pilot pattern used by the identified emitter.

27. (Currently Amended) A cellular radio communication mobile comprising a receiver adapted to receive radio data transmitted by at least two emitters, in the form of ~~at least one~~ a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots distributed within the information data elements according to a predetermined pattern, and for which the value

on emission is known to the mobile, at least two of the emitters using distinct pilot patterns, such that only one pilot can be received by the receiver from the emitters, at a given time and at a given frequency, wherein the receiver is adapted to identify the emitter that emitted the data, using a control information transmission signal, which allows the receiver to identify the emitter that emitted the data when it receives them, and to determine the pilot pattern used by the identified emitter.